CLAIMS

1. A biological reagent capable of inhibiting T-cell mediated rejection of a xenotransplanted organ by blocking the delivery of co-stimulatory signal 2 in order to prevent the activation of xenoreactive T-cells in the recipient.

2. A method for inhibiting T-cell mediated rejection of a xenotransplanted organ, comprising blocking the delivery of co-stimulatory signal 2 in order to prevent the activation of xenoreactive T-cells in the recipient.

3. A method according to claim 2, comprising the administration to said recipient to a soluble form of the CTLA-4 protein from the xenogeneic donor organism.

4. A method according to claim 3, wherein said soluble protein comprises the extracellular domain of porcine CTLA-4 fused to a human Cγ1 sequence.

5. A soluble form of xenogeneic CTLA-4 for use as a medicament.

6. A protein comprising the amino acid sequence SEQ ID:1

7. Nucleic acid which encodes the protein according to claim 6

8. A biological reagent according to claim 1, wherein said reagent is a membrane-associated protein which can bind to CTLA-4.

9. A protein according to claim 8, comprising a single chain antibody with specificity for CTLA-4.

10. Nucleic acid which encodes a protein according to claim 8 or claim 9.

11. A cell which expresses a protein according to claim 8 or claim 9 on its surface.

12. Biological tissue comprising a cell according to claim 11.

13. An animal comprising a cell according to claim 11 and/or biological tissue according to claim 12.

14. A method of transplantation comprising the step of transplanting biological tissue according to claim 12 from a donor animal into a xenogeneic recipient animal.

15. A process for rendering biological tissue suitable for xenotransplantation, comprising the step of treating said biological tissue such that it expresses a protein according to claim 8 or claim 9 on the surface of its cells.

16. A protein according to claim 8 or claim 9, or nucleic acid according to claim 10, for use as a medicament.

17. The use of a protein according to claim 8 or claim 9, or of nucleic acid according to claim 10, in the preparation of a formulation for administration to a xenotransplant recipient or donor.

18. A biological reagent according to claim 1, wherein said reagent is a cell which expresses on its surface MHC class II of a different organism.

19. A cell according to claim 18, wherein said cell is a porcine cell expressing human MHC class II on its surface.

20. A cell according to claim 18 or claim 19, wherein said cell does not express B7 on its surface.

21. A cell according to claim 18 or claim 19, wherein said cell is a transfected immature dendritic cell

22. Biological tissue comprising a cell according to any one of claims 18, 19, 20 or 21.

23. An animal comprising biological tissue according to claim 22.

24. A method of transplantation comprising the step of transplanting biological tissue according to claim 22 from a donor animal into a xenogeneic recipient animal.

25. A process for rendering biological tissue suitable for xenotransplantation, comprising the step of treating said biological tissue such that it expresses xenogeneic MHC class II on the surface of its cells.

26. A cell according to any one of claims 18, 19, 20 or 21, for use as a medicament.

27. The use of biological tissue according to claim 22 in the manufacture of a formulation for administering to a xenotransplant recipient.

28. The use of xenogeneic MHC class II, or nucleic acid encoding xenogeneic MHC class II, in the preparation of a formulation for administering to a xenotransplant donor.